

ISTEP+: Grade 5 Mathematics Blueprint

Standards Assessed	Description	Percent Range *
1 – Number Sense	Questions may include converting numbers up to millions and decimals to thousandths; rounding whole numbers and decimals; arranging and comparing whole numbers and decimals to two decimal places; finding decimal and percent equivalents; identifying prime and composite numbers; and identifying the position of simple positive fractions, mixed numbers, and decimals on a number line.	10-20%
2 – Computation	Questions may include problems involving addition, subtraction, multiplication and division of whole numbers, fractions, mixed numbers and decimals.	10-20%
3 – Algebra and Functions	Questions may include writing and solving simple algebraic expressions involving one or two variables; using the distributive property in numerical equations and expressions; finding positive ordered pairs that fit a linear equation, graphing the ordered pairs, and drawing the line they determine; and using information from a graph or equation to answer questions.	10-20%
4 – Geometry	Questions may include measuring, identifying, and drawing angles, perpendicular and parallel lines, and solid shapes; identifying and justifying congruent triangles by referring to sides and angles; identifying the radius and diameter of a circle and their relationship; identifying shapes with reflectional and rotational symmetry; and identifying rotational turns in terms of both degrees and corresponding fractions.	11-21%
5 – Measurement	Questions may include selecting and applying formulas to find perimeter and area of rectangles, triangles, parallelograms, trapezoids and more complex shapes; finding surface area and volume; and adding and subtracting money in decimal notation.	10-20%
6 – Data Analysis and Probability	Questions may include finding and explaining the mean, median, mode, and range and expressing outcomes of probability situations using words and numbers.	5-15%
7 – Problem Solving	Questions may include solving problems by identifying relationships among numbers in the problem; distinguishing relevant and irrelevant information; sequencing and prioritizing information; observing patterns; applying strategies and results from simpler problems to solve more complex problems; expressing solutions clearly and logically using words, numbers, and symbols (pictures); making precise calculations; and determining if solutions are reasonable.	9-19%

* This range represents the approximate emphasis for each standard on the assessment.